Abstract

The present invention describes a method for the detection of nucleic acid sequences, which is characterized in that the following steps are conducted:

a) at least one nucleic acid is bound to a solid phase;

b) probe molecules are hybridized to the nucleic acids in a sequence-specific manner, whereby the probe molecules are provided with a cleavable bond and a mass label, which is specific for the probe molecule;

c) removal of the unhybridized probe molecules;

d) contacting of the hybridized probe molecules with a matrix, which cleaves said cleavable bonds and at the same time serves as the matrix in a MALDI mass spectrometer;

e) detection of the mass label at those positions where the nucleic acid was bound.